



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

December 19, 2017

Patricia McFadden
Registration Manager
Advan LLC
2525 Meridian Parkway, Suite 350
Durham, NC 27713

Subject: Notification per PRN 98-10 – Adding an alternate brand names “Pavo” and “Pavo Fungicide” and minor label changes.
Product Name: ANDIAMO DUO
EPA Registration Number: 83070-13
Application Date: 09/21/2017
Decision Number: 533710

Ms Patricia McFadden:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

The alternate brand names Pavo Fungicide and Pavo have been added to the product record.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you have any questions, you may contact Gene Kaudy at 703-347-0585 or via email at kaudy.gene@epa.gov.

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Shaja B. Joyner, Product Manager 20
Fungicide-Herbicide Branch
Registration Division 7505P

NOTIFICATION

83070-13

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

12/19/2017

Group	1	3	Fungicides
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Andiamo™ Duo

[ABNs: Pavo; Pavo Fungicide]

ACTIVE INGREDIENTS:

Thiophanate-methyl: dimethyl [1,2-phenylenebis(iminocarbonothioyl)bis[carbamate]21.27%
Tetraconazole: 1-[2-(2,4-dichlorophenyl)-3-(1,1,2,2-tetrafluoroethoxy) propyl]-1H-1,2,4-triazole.....4.20%

OTHER INGREDIENTS 74.53%

TOTAL 100.0%

Contains 1.98 pounds of thiophanate-methyl and 0.39 pounds of tetraconazole per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID	
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
Emergency phone numbers	(800) 424-9300 CHEMTREC (transportation and spills) (800) 222-1222 Poison Control Center

EPA Reg. No.: 83070-14

EPA Est. No.: _____

Net Contents: _____ **[gallons] [gal.] [(liters)]**

[Lot number begins with xx]

[label date/lot code]

Manufactured for:

Advan LLC
2525 Meridian Parkway, Suite 350
Durham, NC 27713

OPTIONAL LANGUAGE THAT MAY APPEAR ON THE LABEL

[See additional Precautionary Statements and Directions for Use inside [the] [book][let].]

[Application Type AG Agriculture]

[Read the [entire] label [carefully] before [using this product.] [opening the container.]

[Peel back [label] [book] here]

[Product of _____] [Note: if manufactured in a country other than the US, country name will appear here]

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

CAUTION. Harmful if inhaled, swallowed, or absorbed through skin. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, and viton ≥14 mils.

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves for all mixes and loaders and for applicators using hand held equipment and chemical resistant aprons for mixers, loaders, and other handlers exposed to the concentrate.

USER SAFETY REQUIREMENTS

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- ~~Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.~~
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms adjacent to treatment areas. Exercise care when making applications of this product, and do not apply when atmospheric conditions favor drift or runoff. Do not contaminate water when disposing of equipment washwater or rinsate.

In order to mitigate concern for reproductive effects to endangered bird and mammal species which may occur incidentally in sugarbeet growing areas, you are required to ascertain through the state Department of Agriculture, or Cooperative Extension Service, whether the treatment area may contain habitat of federally listed bird and mammal species; if so, treatment must be avoided in these areas.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the REI. The REI for each crop is listed in the directions for use associated with that crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

GENERAL PRODUCT USE INFORMATION

Apply Andiamo Duo in a water carrier by spraying onto crop surfaces that are intended to be protected from disease. To obtain adequate coverage of typical agricultural crops, total spray volume will usually range from 20 to 150 gallons per acre (200 to 1400 liters per hectare) for dilute sprays, and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. Both ground and aircraft methods of application are recommended.

Andiamo Duo should be added to the spray tank while filling with water. Keep the agitator running when filling spray tank and during spray operations. When tank mixing this product with other pesticides, observe the more restrictive label limitations and precautions. Do not exceed any label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Combination in the spray tank with other pesticides, fertilizers or surfactants is not recommended unless prior use has shown the combination to be physically compatible, effective and noninjurious under your conditions of use. When an adjuvant is to be used with this product, Advan LLC recommends the use of a Council of Producers and Distributors of Agrotechnology (CPDA) certified adjuvant.

Resistance Management Recommendations

Andiamo Duo contains thiophanate-methyl, a Group 1 fungicide, and tetraconazole, a Group 3 fungicide. Fungal isolates with acquired resistance to Group 1 and/or Group 3 may eventually dominate the fungal population if Group 1 and/or Group 3 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Andiamo Duo and/or Group 1 and/or Group 3 fungicides.

To delay fungicide resistance consider:

- Avoiding the consecutive use of Andiamo Duo or other target site of action Group 1 and/or Group 3 fungicides that have a similar target site of action, on the same pathogens.
- Using tank-mixtures or premixes with fungicides from different target site of action Groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern.

- Basing fungicide use on a comprehensive IPM program.
- Monitoring treated fungal populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or local Advan LLC representative for fungicide resistance management and/or IPM recommendations for specific crops and resistant pathogens.

Rotational Crop Restrictions

Refer to the table below for the minimum time intervals required between the last application of Andiamo Duo and a new crop planting.

Crop	Rotational Interval (in days)
Corn	0
Grains, small (barley, buckwheat, millet, oats, rice, rye, triticale and wheat)	45
Grape	0
Peanut	0
Pecan	0
Soybean	0
Strawberry	0
Sugarbeet	0
Sugarcane	45
All other crops	120

CROPS

PEANUTS

Diseases Controlled	Rate per Acre	Application Directions
Early Leaf Spot (<i>Cercospora arachidicola</i>) Late Leaf Spot (<i>Cercosporidium personatum</i>) Limb Rot (<i>Rhizoctonia spp.</i>) Rust (<i>Puccinia arachidicola</i>) Web Blotch (<i>Phoma arachidicola</i>)	23 fl. oz.	Apply when conditions are favorable to disease, generally when leaf wetness first occurs, or 30 to 40 days after planting. Repeat applications on a 14-day schedule if conditions remain favorable for disease. Do not make more than 4 applications of this product per year. A multi-site mode of action fungicide, such as Echo (or other Chlorothalonil based products) should be used in combination with this product to reduce risk of resistance. Consult with your Extension Service representatives for guidance on the proper use of this product in programs which attempt to minimize the occurrence of disease resistance to fungicides.
Pre-harvest Interval: 14 days (digging). Restricted Entry Interval (REI): 24 hours. Do not feed hay or threshings from treated fields to livestock. Do not graze or feed cover crops grown in treated areas to livestock. Do not make more than 4 applications of this product per year. Do not apply more than 0.41 lbs of tetraconazole active ingredient and 1.4 lbs of thiophanate-methyl active ingredient per acre per year.		

PECANS

Diseases Controlled	Rate per Acre	Application Directions
Brown Spot, (<i>Cercospora fusca</i>) Downy Spot, Leaf Blotch (<i>Mycosphaerella spp.</i>) Powdery Mildew, (<i>Microsphaera penicillata</i>) Scab, (<i>Cladosporium caryigenum</i>) Vein Spot and/or Liver Spot (<i>Gnomonia spp.</i>) Zonate Leaf Spot (<i>Cristulariella moricola</i>)	36 – 41 fl. oz.	Begin applications when conditions are favorable to disease and repeat at 14-21 day intervals until shuck split. Do not apply after shuck split. Apply the highest use rate when disease pressure is severe. Minimum recommended spray volume is 20 gallon for ground applications, 10 gallons for aerial applications. Alternate applications of Andiamo Duo with fungicides with a different mode of action. Consult with your Extension Service representatives for guidance on the proper use of this product in programs which attempt to minimize the occurrence of disease resistance to fungicides.
<p>Pre-harvest Interval: 30 days. Restricted Entry Interval (REI): 3 days. Do not graze or feed cover crops grown in treated areas to livestock. Do not make more than 3 applications of this product per year. Do not apply more than 0.5 lb of tetraconazole active ingredient and 2.1 lbs of thiophanate-methyl active ingredient per acre per year.</p>		

SUGARBEETS

Diseases Controlled	Rate per Acre	Application Directions
Cercospora Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe</i>) Ramularia (<i>Ramularia beticola</i>)	32 fl. oz.	Apply when conditions are favorable for Cercospora Leaf Spot, Powdery Mildew, or Ramularia. Do not make more than one application of this product per growing season. To obtain adequate coverage of typical agricultural crops, total spray volume usually ranges from 20 to 150 gallons per acre for dilute sprays, and 5 to 10 gallons per acre for concentrate ground sprays and aircraft applications. For areas east of the Rocky Mountains: Do not make more than one application of this product per season. Follow resistance management guidelines.
<p>Pre-harvest Interval: 21 days Restricted Entry Interval (REI): 24 hours. Do not make more than one application of this product per year. Do not apply more than 0.102 lb of tetraconazole active ingredient and 2.1 lbs of thiophanate-methyl active ingredient per acre per season.</p>		

OPTIONAL LABEL LANGUAGE: USE IN CALIFORNIA BY CHEMIGATION ONLY FOR SUGARBEETS.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: sprinkler (including center pivot), lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation system. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

For specific information about calibration, contact State Extension Service specialists, equipment manufacturers, or other irrigation experts.

Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make the necessary adjustments should the need arise.

Prevent the movement of Andiamo Duo into the soil:

- Minimize pesticide contact with the soil surface by chemigating above the crop canopy.
- Stop chemigation when pesticide mixture is observed running off crop surfaces or after 0.25 inches of water has been applied, whichever occurs first.
- Allow for sufficient time after chemigation for crop surfaces to dry prior to expected rainfall or to irrigation applied above the crop canopy.

Sprinkler Chemigation

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump motor when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, fill nurse tank half full with water. Add Andiamo Duo slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, etc. should be added last. If compatibility is in question, use the compatibility jar test before mixing a whole tank.

Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures.

Andiamo Duo should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in a dry, temperature-controlled, secure place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility.

CONTAINER HANDLING

[Containers ~~≤ 5~~ less than or equal to 5 gallons]: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

~~Containers ≥ 5 Gallons~~ [Containers more than 5 gallons] Non-refillable container. Do not reuse or refill this container. Triple rinse **or pressure rinse** container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.** Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Bulk Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When the container is empty, replace the cap and seal all openings that have been opened during use and return to the point of purchase or to a designated location named at the time of purchase of this product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged or leaking, call Chem-Trec at (800) 424-9300. If the container is damaged and leaking or material has been spilled, follow these procedures:

- Cover spill with absorbent material.
- Sweep into disposal container.
- Wash area with detergent and water and follow with clean water rinse.
- Do not allow to contaminate water supplies.
- Dispose of according to instructions.

If not returned to the point of purchase or to a designated location, clean empty container as instructed above and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

THIS CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

WARRANTY AND LIMITATION OF DAMAGES

Conditions of sale: To the extent consistent with applicable law, Advan LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to Advan LLC. ADVAN LLC DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. To the extent consistent with applicable law, ADVAN LLC SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND SIPCAM AGRO USA, INC.'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. BUYER AND USER ACKNOWLEDGE AND ASSUME ALL RISKS AND LIABILITY RESULTING FROM HANDLING, STORAGE AND USE OF THIS PRODUCT. SIPCAM AGRO USA, INC. DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.

Andiamo is a trademark of Sipcam Agro USA, Inc.

Andiamo Duo (EPA Reg. No. 83070-13) (Notification 09-21-2017, Revised 11-7-2017)